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Christian Ohler

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EXAMINER

NGUYEN, HOANG M

ART UNIT

PAPER NUMBER

3748

NOTIFICATION DATE

DELIVERY MODE

11/18/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

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Applicant's amendment dated September 10, 2009, has been fully considered.

Applicant has amended independent claims 1, 9, to eliminate the second heating means, and add a new limitation "first heat generating means generating heat from electrical energy supplied to the heat storage device, wherein said first heat generating means is contained within the heat storage device", and argued the applied references do not disclose that limitation. It's noted that concept is clearly taught by the secondary reference, US 5384489 (Bellac), which discloses an electric heater 34 inside a heat storage device 43.

Applicant argued it would not have been obvious to combine the references. The Examiner disagrees. All references are from the same field of endeavor. i.e., power systems having heat generating means and heat storage means. Therefore, it would have been obvious to modify one reference in view of the other to improve the efficiency of the system.

Applicant argue nowhere in his admitted prior art does Applicant disclose the heat storage means and heat generating means. The Examiner is very surprising about this argument. Applicant's admitted prior art includes the first seven lines of claim 1 (in form of Jepson claim) that clearly recites the heat storage means, heat transfer means and heat generating means.

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For the reasons set forth above, a new ground of rejection has been made because of Applicant's amendment and this Office Action has been made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 8-10, are rejected under 35 U.S.C. 102(b) as being anticipated by US 5384489 (Bellac).

Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43, the heat transfer devices 44, 54, for transferring heat to drive a steam-powered turbine-generator 64.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4942736 (Bronicki) in view of U.S. 5384489 (Bellac). Bronicki discloses a system having a thermal storage device (160 or the reservoirs 104, 114, can also be considered as thermal storage devices), turbines 120a, 120b for driving an electric

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generator 130 to drive compressors 140 to warm up the thermal storage device 160, there are two heating means 102, 112, that are identical. Bronicki does not disclose the heat generating means is an electric heater inside a vessel. Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43, the heat transfer devices 44, 54, for transferring heat to drive a steam-powered turbine-generator 64. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide an electric heater inside the thermal storage device of Bronicki as taught by Bellac for the purpose of achieving appropriate heat level.

Claims 1, 3-10, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted prior art (pages 1-2, and lines 1-7 of original claim 1 in form of Jepson claim) in view of U.S. 4942736 (Bronicki) and Bellac. Applicant's admitted prior art on pages 1-2 and especially lines 1-7 of original claim 1 discloses the system with a heat storage device, heat transfer means, first heat generating means for heating the storage device with electrical power. Applicant's admitted prior art does not disclose a second heat generating means, and a heat resistor/resistance for the thermal storage. Bronicki discloses a system having a thermal storage device (160 or the reservoirs 104, 114, can also be considered as thermal storage devices), turbines 120a, 120b for driving an electric generator 130 to drive compressors 140 to warm up the thermal storage device 160, there are two heating means 102, 112, that are identical. It would have been obvious at the time the invention was made to a person having ordinary skill

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in the art to provide a second identical heat generating means in the system of Applicant's admitted prior art as taught by Bronicki for the purpose of supplementing the input power. Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a heat resistor with switch means in Applicant's admitted prior art as taught by Bellac for the purpose of providing a more accurate heating and control means.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
11/17/2009